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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,979	02/27/2004	Wolfgang Aderhold	008304	6862

7590

08/11/2005

Applied Materials, Inc.
Patent/Legal Dept.
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Santa Clara, CA 95052

EXAMINER

FUQUA, SHAWNTINA T

ART UNIT PAPER NUMBER

3742

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,979	ADERHOLD ET AL.	
	Examiner	Art Unit	
	Shawntina T. Fuqua	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 6-8, 10-11, 16, 20, 22, 23, and 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Samoilov et al (US6455814).

Samoilov et al discloses a thermal processing apparatus/method comprising a radiant heat source (102), disposing a substrate to be thermally processed on a front side to form features therein with a back side facing a radiant heat source, thermally monitoring (118) the front side of wafer, peripherally supporting the substrate, substrate is disposed with the front side facing upwardly, reflecting heat emitted from the front side of substrate back to the front side, front side facing generally horizontal reflector (122) above the radiant heat source (Figure 1), radiant heat source is below reflector, and substrate is held between reflector and radiant heat source with a processing side facing reflector (column 2, lines 41-47, column 3, lines 15-31, 45-51, 58-60, Figures 1-3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3742

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4-5, 9, 12-15, 17-19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samoilov et al in view Ballance et al (US6090210).

Samoilov et al discloses all of the recited subject matter except thermally monitoring temperature with a plurality of radial positions, a ring support, an edge exclusion zone with a width of no more than 3 mm, a substrate disposed with front facing down, a detachable holding member capable of holding substrate from a top side. Ballance et al discloses thermally monitoring temperature at a plurality of radial positions (column 4, lines 25-31), and a ring support (18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a plurality of temperature sensors and ring support of Ballance et al in the apparatus/method of Samoilov et al because, a plurality of temperature sensors allows for a more uniform temperature and a ring support holds the substrate more securely.

Samoilov et al in view of Ballance et al discloses all of the recited subject matter except an edge zone no greater than 3 mm and a substrate with a front side facing downwardly. An edge zone no greater than 3 mm and a downwardly facing substrate is conventional and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an edge zone no greater than 3 mm as a means to allow most of the substrate's backside to be exposed and downwardly facing the substrate allows the components to be formed on the substrate via conductive heating reducing the chance of the components to be damaged due to direct heating.

Response to Arguments

5. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

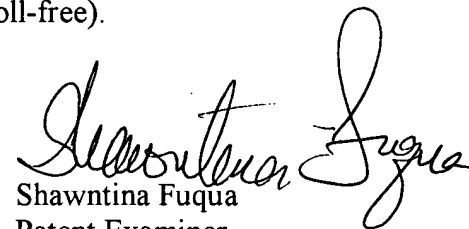
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (571) 272-4779. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf
August 8, 2005


Shawntina Fuqua
Patent Examiner
Art Unit 3742